

The Big Switch

Rewiring the World, From Edison to Google

By Nicholas Carr

SUMMARY

In his 2009 book, *The Big Switch*, Nicholas Carr takes the reader through a time travel adventure over the span of a century. An adventure that immerses us in the transformation and creation of new technologies, from the invention of Electricity to the development of the “World Wide Computer” -as he defines the union of personal computers into one global digital entity. A three hundred four pages long print, now available in digital form, is more than anyone can expect from its title. *The Big Switch: Rewiring the World, From Edison to Google* covers, in a fascinating narrative, the early years of electrification, the invention of computers, the evolution to personal computers, the globalization of internet connectivity and the futuristic idea of implanting computers in people’s brains.

As one of the approved readings of the Master of Education in Educational Technology Leadership from LAMAR University, this title was especially interesting due to the emphasis on “rewiring the world”. Even as a required reading it proved to be quite refreshing and engaging. A bestseller among computer and internet books, *The Big Switch*, draws a correlation between electrification and the direction of the digital revolution.

At the beginning of the electrification era, every manufacturer of goods had to produce their own power either by building water wheels, windmills or later with the introduction of the steam engine. It wasn’t until the creation of a power grid that utilities became cheaper and allowed for the electrification of family homes. This centralization of power, parting from individuals creating their “own” electricity, to the creation of a power utility is viewed by Carr as the analogy to the future of computing.

In Carr’s point of view, we are in the middle of a transition in computing, not far from the one experienced in the late 1800’s. Outsourcing seems to be the future of computers; companies will soon relinquish their own private hard drives to the more accessible virtual portal.

The Big Switch is divided into two parts, with the first placing an emphasis on the beneficial evolution of technology. He describes “one machine” that evolved from the invention of electricity and the implementation of the power grid, thus creating the world of “utilities”; allowing for the electronics era to grow into the creation of big computers and later the personal computer. Towards the end of the first part he builds momentum to the analytical examination of how the digital world came to be, a virtual city in which we all live when we connect to the “net”.

In Part Two he concentrates his effort in describing the benefits and disservices of living in a complete digital world. Carr establishes that “Technology shapes economics and economics shapes society.” Later he adds:

“We see the interplay of technology and economics most clearly at those rare moments when a change takes place in the way a resource vital to society is supplied, when an essential product or service that had been supplied locally begins to be supplied centrally, or vice versa.”

“A hundred years ago, we arrived at such moment with the technologies that extend man’s physical powers. We are at another such moment today with the technologies that extend our intellectual powers.” Carr, N. (2009). *The big switch: Rewiring the world, from Edison to Google*. W. W. Norton & Company. Kindle Edition: Loc 340-43

His comparison to the events in the past century provides insight into the evaluation of newer technologies, including Web 2.0 tools such as Google, YouTube and PlentyOfFish; which share a virtual space in the internet instead of being stored on a hard drive. He defines economic and social consequences we would be exposed to while transitioning into the digital utility grid that paint a somber image of our future. The “Great Unbundling” caused by the new digital marketplace allows for better consumer choice, though it signifies the fall of products and their manufacturers as we know them. He talks of “books being sold by the page”, iTunes allowing for individual songs purchase instead of the whole album, all these causing less publicized creations to fall into darkness, a waste of effort and space for all those unread pages or unheard songs. Jobs are being lost, not because of lack of skill or knowledge but because the Internet’s Universal Medium allows for a cheaper more effective alternative. Journalists, overseas correspondents, reporters and professional photographers are being replaced by amateurs and common citizens, who voluntarily and expecting only their own pride as retribution, post their articles, comments and photographs into their blogs, wikis, personal web pages and social network accounts. These allow for an increase on the amount of material available, facilitating the consumer’s decision

on what is good and what is not. Regrettably quantity does not equal quality. The trend to reduce professional creative works to reduce costs is causing the flow of mediocre works being posted online. Carr reminds us that:

“...Internet is a very unusual marketplace, where information of all sorts tends to be given away and money is made through indirect means like advertising.”

“We may find that the culture of abundance being produced by the World Wide Computer is really just a culture of mediocrity –many miles wide but only a fraction of an inch deep.” Carr, N. (2009). *The big switch: Rewiring the world, from Edison to Google*. W. W. Norton & Company. Kindle Edition: Loc 2114-17 - 2114-23

Before culminating his book in an insightful Epilogue, Carr confesses he is opposed to the idea of human bodies being “plugged into” a computer or any of the like. Quoting Bill Gates he writes: “I’m happy to have the computer over there and I’m over here.”

It might seem out of a science fiction movie or taken from Isaac Asimov’s literature, nonetheless, everyone seem to agree, Gates included, that in the near future the possibility of an Artificial Intelligence is concrete and unavoidable.

He closes his best-seller with a thought back to the pre-electricity times and the reminder that “All technology change is generational change.”

A must read for any person that is interested in technology, but most importantly a must read for all those people that have forgotten the path that took us to where we are now.

References

- Carr, N. (2009). *The big switch: Rewiring the world, from Edison to Google*. W. W. Norton & Company. Kindle Edition
- The New Oxford American Dictionary